REMARKS

I. Introduction

Claims 1-8 are currently pending in this application. Claim 2 has been amended to correct the inadvertent removal of a limitation as filed in the preliminary amendment on December 28, 2005. No new matter has been added. In view of the foregoing amendments and the following remarks, Applicants respectfully submit that the claims are allowable and the application is in condition for allowance.

II. Information Disclosure Statement

The Examiner has not considered some of the references listed in the information disclosure statements (IDS) submitted on March 12, 2008 and March 24, 2009 for allegedly not being legible. Applicants have submitted copies of the references previously listed in an IDS but not considered by the Examiner on October 8, 2009.

III. Claim Objections

Claim 2 was objected for containing informalities. It is respectfully submitted that the amendments to claim 2 obviate the objections. Therefore, withdrawal of the objections is requested.

IV. Claim Rejections under 35 U.S.C. § 103(a)

Claims 1-8 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Christian (WO 03/076339) in view of Noya et al., (U.S. 6,566,009). Applicants respectfully traverse this rejection.

Claim 1 recites,

> An alkaline battery comprising a positive electrode, a negative electrode and an alkaline electrolyte,
> said positive electrode comprising a positive electrode material mixture containing nickel oxyhydroxide, electrolytic manganese dioxide and a graphite conductive material,
> **wherein said nickel oxyhydroxide comprises a crystal having a β type structure, said crystal having manganese dissolved therein, and**
> **the amount of said manganese contained in said nickel oxyhydroxide is 0.5 to 10 mol% relative to the total amount of nickel and said manganese contained in said nickel oxyhydroxide.**

[Emphasis added]. Claim 2 also recites, in pertinent part, a battery in which a positive electrode comprises a positive electrode material mixture containing nickel oxyhydroxide comprising a crystal having manganese dissolved therein and having a β type structure.

This battery configuration (exemplified in batteries D2, E2 and F2 in the examples) achieves unexpected improvements in low load and high load discharges as compared with battery C1 in which no manganese is contained in the nickel oxyhydroxide, (see Table 1) or in which zinc is used, (see Tables 2 and 3). Moreover, Table 2 illustrates that the batteries having a configuration as recited in claim 1, (batteries D2, E2 and F2) have a discharge capacity of greater than 225 mAh/g in the first plateau region and a discharge capacity in the range of 10 to 20 mAh/g in the second plateau region. Furthermore, as shown in Table 3 the batteries having a configuration as recited in claims 1 and 2, (batteries D2, E2 and F2) have improved discharge capacities at 45 mA and improved discharge times. Therefore, the instant specification provides clear evidence of the unexpected improvement in discharge capacity and discharge time as compared to other battery configurations.

The Examiner on page 5 of the office action mailed July 9, 2009, concedes that Christian does not disclose a battery comprising electrolytic manganese dioxide as recited in claims 1 and 2, and therefore relies on Noya for allegedly remedying this deficiency. However, a person having ordinary skill in the art would not have found it obvious to modify the battery of

Christian by adding manganese dioxide as such a battery achieves unexpectedly improved discharge capacity and time, as discussed above as compared to other batteries.

Moreover, Christian discloses that nickel oxyhydroxide can contain less than 10 mass% of bulk dopant, and cites aluminum, manganese, cobalt, zinc, gallium, indium, or bismuth as the bulk dopant, (see page 3 lines 6-10). However, Christian is silent as to why the bulk dopant is added to nickel oxyhydroxide. Furthermore, Christian recites a beta nickel oxyhydroxide and a gamma-nickel oxyhydroxide (claim 3). However, Christian is silent as to the difference in discharge characteristics resulting from the difference between the beta structure and the gamma structure.

As such, Christian merely discloses a beta or gamma type nickel oxyhydroxide doped with less than 10 mass% of aluminum, manganese, cobalt zinc, gallium, indium, or bismuth. Christian fails to suggest selecting a beta type nickel oxyhydroxide in which 0.5 to 10 mol% of manganese is dissolved to maintain the conductivity of the nickel oxyhydroxide in the second plateau region.

Therefore, even if Christian is combined with Noya, it would not have been obvious that the alkaline battery of the present invention using a positive electrode including the nickel oxyhydroxide and electrolytic manganese dioxide achieves unexpectedly high characteristics in low load and high load discharges.

Moreover, Applicants do not agree with the Examiner's contention on pages 6-7 of the office action mailed July 9, 2009, in which it is asserted that "once nickel oxyhydroxide and conductive graphite are mixed with an aqueous electrolyte solution containing 38 wt% KOH it will inherently display the recited properties."

It is respectfully submitted that, inherency is inapplicable to a combination of references. Therefore, the battery configuration recited in claim 2 would not be "inherent" over Christian in view of Noya. Moreover, even if "nickel oxyhydroxide" of the present invention is inherent from "nickel oxyhydroxide" of Christian, an "alkaline battery" obtained by combining Christian with Noya would not be inherent.

Thus, it is clear that claims 1 and 2 are allowable over the cited prior art references. Furthermore, claims 3-8 depend from and further define the subject matter of claim 1 and therefore are also allowable.

In view of the above amendments and remarks, Applicants respectfully submit that this application should be allowed and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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